

REMARKS

Claims 1-27 are pending in the application. Of these claims, Claims 1, 8, 15 and 22 are independent claims. Claim 22 has been amended for further clarification. Support for this claim amendment can be found at least on page 9, lines 17-24 of the specification as originally filed. Claims 1-25 and 27 are being rejected. Claim 26 is being objected to. No new matter has been introduced by way of this Amendment.

Allowable Subject Matter

At paragraph 22 of the Office Action, Claim 26 was objected to as being dependent upon a rejected independent claim. Applicant notes with appreciation the finding that Claim 26 will be allowable if rewritten in independent form. Claim 26 has not been so rewritten because it is believed that the respective independent claim is allowable.

Regarding 35 U.S.C. § 102(b) Rejection

Claims 1, 7, 8, 14, 15 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Rouse (U.S. Patent No. 5,144,293).

Before discussing the cited references, a review of the Applicant's disclosure may be helpful. In disclosed embodiments, a logical link can include external ports on different switch devices in a multistage switch to provide redundancy. The logical link couples a destination to a multistage switch. The multistage switch includes a plurality of external ports. Each physical link is coupled to one of the plurality of external ports. The multistage switch also includes a matrix of coupled switch devices. At least two of the physical links are coupled to external ports on different switch devices. A frame received for the destination is forwarded through at least one of the switch devices to one of the physical links in the logical link. In this way, the switch device, which receives the forwarded frame forwards the frame based on the logical link toward less than all of the physical links of the logical link to reduce the number of subsequent switch devices through which the frame is forwarded. (See Specification, page 2, lines 5-27.)

In contrast, the cited reference, Rouse, is directed to a method and apparatus for a serial link communication using interconnections of ports to forward frames. In particular, in FIG. 3, a port receives a frame on a bus. The port logic examines the frame and establishes a connection. (See Rouse, col. 5, lines 34-39.) After establishing a connection, the frame is sent from a matrix bus to a matrix associated with a port where port logic examines the frame. This frame is then forward to an output of the link to the connected device. (See Rouse, col. 5, lines 59-63.) In this way, Rouse merely establishes a connection and sends a frame to an output of a device link. Rouse does not, however, disclose forwarding a frame based on a logical link to reduce the number of subsequent switch devices receiving the forwarded frame as claimed by Applicant in Claim 1 (“. . . the switch device which receives the forwarded frame forwarding the frame based on the logical link toward less than all of the physical links of the logical link to reduce the number of subsequent switch devices through which the frame is forwarded . . .”) Accordingly, Applicant submits that Claim 1 is patentably distinguished over Rouse and is in allowable form.

Independent Claims 8 and 15 have similar limitations, and therefore, should be allowable for at least the same reason as stated above.

Claim 7 is dependent on independent Claim 1, Claim 14 is dependent on independent Claim 8 and Claim 21 is dependent on independent Claim 15. Accordingly, these dependent claims should be allowable for at least the same reasons as stated above.

Accordingly, the rejections under 35 U.S.C. 102(b) as being anticipated by Rouse are believed to be improper.

Regarding 35 U.S.C. § 103(a) Rejection

Claims 2-6, 9-13, 16-20, 22-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rouse in view of Kanuri et al. (U.S. Patent No. 6,807,179) hereafter “Kanuri.”

Kanuri provides a trunking arrangement in a network switch. In particular, switching logic determines an output port for each corresponding received layer 2 type data packet based on a corresponding switching decision for the received layer 2 type data packet, and based on selection of an entry in a trunk distribution table based on information within the received layer 2 type data packet. (See Kanuri, col. 2, lines 25-45; Abstract.) In this way, the network switch is

able to perform trunk-based switching with minimal complexity, ensuring switching of data packets at the wire rate. (See Kanuri, Abstract.)

Referring now to Kanuri's switching rules logic, the switching rules logic obtains a port vector corresponding to a MAC address within an address table. The port vector of the corresponding address table entry specifies at least one destination switch port. The switching rules logic determines whether the destination switch port specified in the port vector is trunk enabled. If the destination switch port specified in the port vector is not trunk enabled, then the received layer 2 type data frame is switched (i.e., output) back onto the network by the destination switch port specified in the port vector. (See Kanuri, col. 6, lines 5-24.) In this way, Kanuri performs look-ups of existing port vectors to obtain a port. However, Kanuri does not teach computing forward vectors using a switch device to forward data.

Therefore, Kanuri does not disclose (1) forwarding a frame based on a logical link to reduce the number of subsequent switch devices or (2) computing a forward vector, locally using the switch device, for the received data dependent on a selected trunk table entry for the received data. Instead, Kanuri is focused on switching with minimal complexity to ensure switching of data packets at a wire rate. Further, Kanuri, by applying switching logic, performs look-ups of a port vector instead of computing a forward vector.

Accordingly, Kanuri, like Rouse, does NOT disclose the claimed feature of ". . . *the switch device which receives the forwarded frame forwarding the frame based on the logical link toward less than all of the physical links of the logical link to reduce the number of subsequent switch devices through which the frame is forwarded . . .*" as claimed by Applicant in Claim 1 or ". . . *computing a forward vector, using the switch device, for the received data dependent on a selected trunk table entry for the received data, the forward vector indicating the internal output port through which to forward the received data . . .*" as claimed by Applicant in amended Claim 22.

Thus, no combination of Kanuri and/or Rouse imply, suggest or make obvious the claimed process or system as claimed in independent Claim 1 or Claim 22. Independent Claims 8 and 15 have similar limitations. Claims 2-6 are dependent on independent Claim 1, Claims 9-13 are dependent on independent Claim 8 and Claims 16-20 are dependent on independent Claim 15, and Claims 23-25 and 27 are dependent on independent Claim 22 and inherit these claim



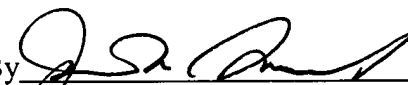
limitations of the respective independent claims. Therefore Claims 2-6, 9-13, 16-20, 22-25 and 27 are believed to be in condition for allowance. Acceptance is respectfully requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims (Claims 1-27) are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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